## Commonwealth of Kentucky Division for Air Quality

## PERMIT APPLICATION SUMMARY FORM

Completed by: Robert L. Williams

GENERAL INFORMATION:		
Name: Address:	Gallatin Materials, LLC 525 Hance Road, Verona, Kentucky 41092	
Date application received:	May 4, 2005	
SIC/Source description:	3274 / Lime Production	
EIS #:	21-077-00031	
AI number:	71400	
Permit number:	V-06-xxx	
APPLICATION TYPE/PERMIT ACTIVITY	<u>′</u> :	
[x] Initial issuance	[ ] General permit	
[ ] Permit modification	[ ]Conditional major	
Administrative	[x] Title V	
Minor	[ ] Synthetic minor	
Significant	[ ] Operating	
[ ] Permit renewal	[x] Construction/operating	
COMPLIANCE SUMMARY:  [ ] Source is out of compliant [x] Compliance certification s	<u>=</u>	
APPLICABLE REQUIREMENTS LIST:		
[ ] NSR	[x] NSPS [x] SIP	
[x] PSD	[x] NESHAPS [ ] Other	
[ ] Netted out of PSD/NSR	[ ] Not major modification per 401 KAR 51:017, 1(23)(b) or 51:052,1(14)(b)	
<ul> <li>[x] Source subject to a MAC</li> <li>[] Source requested case-by-</li> <li>[] Application proposes new</li> <li>[x] Certified by responsible of</li> <li>[x] Diagrams or drawings income</li> </ul>	r alternative operating scenarios  T standard  -case 112(g) or (j) determination  c control technology  fficial luded  prmation (CBI) submitted in application  sures	

## **EMISSIONS SUMMARY:**

Pollutant	Actual (tpy)	Potential (tpy)
$PM/PM_{10}$	288.869 / 256.196	288.869 / 256.196
$\mathrm{SO}_2$	108.657	108.657
NOx	970.827	970.827
CO	464.289	464.289
VOC	1.623	1.623
LEAD	0.022	0.022
HAP∃10 tpy (by CAS)		
HC1	62.862	62.862

## SOURCE PROCESS DESCRIPTION:

Gallatin Materials, LLC will be operating in conjunction with Sterling Ventures LLC, who will supply the limestone for Gallatin Materials, LLC. Any limestone, after screening by Gallatin Materials, that is considered too large or too small for Gallatin's use will be returned to Sterling Ventures.

There will be two new preheater rotary kilns at the plant. Both kilns utilize the same basic feed and counter fuel feed process. For both kilns, stone is fed directly into the kiln at a controlled rate while fuel is fed into the opposite end. As calcination takes place, the limestone is converted to quick lime. The lime is cooled and screened and either transported directly to a storage bin or screened and deposited into several bins to await shipping. Particulate emissions from the kilns are controlled by baghouses.

Lime is transported to the hydrate plant via pneumatic conveyor. The lime bin at the hydrate plant feeds into the hydrator. The hydrated material is stored in a silo. From the silo, it is loaded into trucks.

A lime additive is also stored in two silos that may later be added to the lime utilizing the same conveyor system prior to loading into trucks.

Coal is delivered to the plant by truck and barge and stored in separate silos. Material is fed by vibrating conveyors under the silos through a conveying system, to a storage bin for each kiln. From these bins, the material is conveyed to a pulverizer to process the fuel for burning.